



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,548	08/13/2001	Donald James MacLeod	8032107.12/JAS	9804

7590

06/11/2002

James A. Sheridan  
THOMASON, MOSER & PATTERSON, LLP  
Suite B  
4149 El Camino Way  
Palo Alto, CA 94306-4036

EXAMINER

TAMAI, KARL I

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 06/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/929,548	MACLEOD, DONALD JAMES	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tamai IE Karl	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 January 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/13/01 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: _____.                                   |

***Drawings***

1. Figures 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Objections***

3. Claim 14 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. Claim 14 does not include any additional limitations to the parent claim 13.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 9, 10, and 12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Marcum et al.(Marcum)(US 3,047,869). Marcum teaches an enclosed housing with upper and lower portions. The lower portion 14 having a well with a motor stator mounted thereon. The rotor hub having a thick portion at 2 on which the disc 8 is mounted and a lower portion on which the rotor magnetic 6 is mounted. The shaft being fixed to the housing by spring mounts 15, 16.

6. Claims 9-11 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Komatsu et al.(Komatsu)(JP 59-164,413). Komatsu teaches a motor assembly having a spindle hub 8 rotating an mirror disc about a fixed shaft. The hub supporting a magnet 9 on the lower portion and having a dynamic pressure bearing between the shaft 7 and the hub 8. The motor having an enclosed housing with a well in the lower housing. The stator 11 of the motor mounted to the inner surface of the well.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 9, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herdman et al.(Herdman)(US 3,864,748) and Kazama et al.(Kazama)(US 4,875,110). Herdman teaches an enclosed housing with a lower portion 12' having a

Art Unit: 2834

stator 32 mounted on the inner wall and an upper portion 17. Herdman teaches the rotor 31 having a hub 27 to drive a magnetic disc 28, where the hub is wider than the motor magnet 31. Herdman teaches every aspect of the invention except the rotor rotating around a fixed shaft. Gilovich teach a disc drive motor with a fixed shaft. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motor of Herdman with the fixed shaft of Gilovich to provide a high density, high speed motor for a disc drive.

9. Claims 11, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marcum et al.(Marcum)(US 3,047,869) in further view of Lin(US 4,965,476). Marcum teaches every aspect of the invention except the use of a multipolar annular magnet on the rotor. Lin teaches a multipolar annular magnet 46 to rotate a disc drive. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motor of Marcum with the permanent magnet of Lin to allow the motor to operate as a brushless DC motor to control the rotation of the rotor discs when storing magnetic memory.

10. Claims 11, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herdman et al.(Herdman)(US 3,864,748) and Kazama et al.(Kazama)(US 4,875,110), in further view of Lin(US 4,965,476). Herdman and Kazama teach every aspect of the invention except the use of a multipolar annular magnet on the rotor. Lin teaches a multipolar annular magnet 46 to rotate a disc drive.

Art Unit: 2834

It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motor of Herdman and Kazama with the permanent magnet of Lin to allow the motor to operate as a brushless DC motor to control the rotation of the rotor discs when storing magnetic memory.

### ***Double Patenting***

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claim 9 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 30, of U.S. Patent No. in view of Herdman et al.(US 3,864,748). Claim 30 recites all the limitations of claim 9 except for the upper house section. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motor of claim 30 with an upper housing section to protect the magnetic discs from contamination, as shown in Herdman.

Art Unit: 2834

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (703) 305-7066.

The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nestor Ramirez, can be reached at (703) 308-1371. The facsimile number for the Group is (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Karl I Tamai  
PRIMARY PATENT EXAMINER  
June 10, 2002

